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EXAMINER				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/743,480  
Filing Date: October 17, 2001  
Appellant(s): STEMPLE, GUNTER

\_\_\_\_\_  
James F. McKeown  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed February 12, 2009 appealing from the Office action mailed September 10, 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is substantially correct. Claim 45 has been cancelled via Examiner's Amendment.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. Claim 45 has been cancelled.

**NEW GROUND(S) OF REJECTION**

Claims 26-28, 44, 46 and 47 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,400,781	DAVENPORT	3-1995
4,998,018	KURAHASHI et al.	3-1991
6,095,986	BRAIG et al.	8-2000

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26-28, 44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,400,781 to Davenport in view of US 4,998,018 to Kurahashi et al. and in further view of US 6,095,986 to Braig et al.

As to claim 44, Davenport discloses a system for monitoring the carbon dioxide level of a patient, the system comprising a mask **10** capable of surrounding a patient's mouth and nose (Fig. 3); a mask adapter **34** configured to include an air tube **24** connected to an interior portion of the mask; and a sensor adapter **36** connected to the mask adapter **34** for supplying the air received within the air tube towards a gas analyzer (not shown). Element **36** is being interpreted as a sensor adapter since it connects the air tube to a gas analyzer, which inherently includes a sensor. Davenport is silent with regards to the specifics of the gas analyzer.

Kurahashi discloses a respiratory gas analyzer for monitoring the carbon dioxide of a user/patient, the analyzer comprising an analysis duct **210** having an end for receiving air from a user and another end being open so as to lead directly to outside air without the use of a pump (col. 6, lines 9-13); a sensor (IR source **24** and detector **30**) for generating signals proportional to the carbon dioxide level of the exhaled air; wherein the analysis duct comprises windows **23** to allow the IR source and the detector to communicate with each other; and an evaluation device **33**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Davenport to use the gas analyzer of Kurahashi since the gas analyzer of Kurahashi monitors the carbon dioxide level of exhaled air and is capable of monitoring the exhaled air received from the patient interface of Davenport. Both references deal with monitoring respiratory carbon dioxide level in exhaled air.

Furthermore, it should be noted that the Kurahashi reference discloses a sensor adapter comprising a sensor and an analysis duct, and that one of ordinary skill in the art would combine the sensor adapter of Kurahashi to the mask adapter of Davenport in order for the sensor adapter to receive expired gases from the mask.

With regards to the newly added limitation of the sensor adapter having a receiving device on which the sensor is detachably attached, it is noted that Kurahashi discloses an analysis duct having windows and an IR source and a detector. These elements are taught to be arranged in a circuit diagram in Fig. 2. Thus, Kurahashi is silent with regards to the actual housing assembly of the device. However, Braig discloses a similar type of arrangement, wherein an analysis duct comprises windows and wherein the outer surface of the analysis duct includes a

sensor adapter that detachably receives a sensor/gas analyzer (Fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Davenport/Kurahashi to include a sensor adapter arranged on the analysis duct because it would allow the analysis duct to be detachably fitted to the sensor, which would also allow the sensor to be reused for gas analysis of other patients.

With regards to claim 26-28, Davenport teaches the mask patient interface comprising a probe **30** having an excess oxygen opening provided to supply oxygen to the mask interior; and openings **26** provided in the mask for gas exchange between the mask interior and the outside air.

With regards to claim 46, the sensor of Kurahashi is fully capable of measuring CO<sub>2</sub> content for each exhaled breath of air.

#### **NEW GROUND(S) OF REJECTION**

##### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 26-28, 44, 46 and 47 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Independent claim 44 was amended on Nov. 16, 2006 to recite that the “analysis duct...being open so as to lead directly to outside air without the use of a pump”. Upon review of the application’s written description, the examiner has concluded that there is no support for the analysis duct being open to outside air without the use of a pump. It is noted that all claim limitations, including negative limitations, must have support in the written description. Thus, the amendment to claim 44 raises the issue of new matter.

According to MPEP 2173.05(i), any negative limitation or exclusionary proviso must have basis in the original disclosure. . Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Note that a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a prima facie case for lack of descriptive support. *Ex parte Parks*, 30 USPQ2d 1234, 1236 (Bd. Pat. App. & Inter. 1993).

#### **(10) Response to Argument**

In response to appellant’s argument that the examiner’s conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In this instance, all three references to Davenport, Kurahashi and Braig are directed toward respiratory gas sampling devices:

(a) The Davenport reference discloses a respiratory device having a mask for receiving expired respiratory gases from the patient and delivering said gases to a gas monitor, as illustrated in Fig. 4.

(b) The Kurahashi reference discloses a respiratory device having a gas monitoring device that also receives expired respiratory gases from a patient (see Fig. 2).

(c) The Braig reference discloses a respiratory device that uses an airway adapter for use with a gas monitoring device.

As shown above, all three references shown to be in the same field of inventions.

With regards to the appellant's arguments that Davenport's gas sampling masks contain no sensor adapter, it is noted that the modification with the Kurahashi and Braig references will provide the sensor adapter as claimed (and as further discussed below).

The initial modification to Davenport in view of Kurahashi will have the expired respiratory gases coming from tube **36** of Davenport being delivered to the analysis duct **210** of Kurahashi, which is connected to an infrared source **24** and a photodetector **30**. The appellant argued that Kurahashi only discloses a connector tube **22** having an end **210** for holding in an examinee's mouth and an open end **220** vented to the atmosphere, an infrared light source **24** and the photodetector **30** being located respectively below and above the connector tube **22** at distinctly separate locations (emphasis added). However, it is noted that each of Figs. 1 and 2 of Kurahashi is merely a circuit diagram for the operation of the device, and not a physical 3D representation of the device, i.e., the figures are a schematic for the invention. Thus, the distance



between the infrared light source and the photodetector is irrelevant. Instead, relevance is only given to the circuit arrangement of each component. Clearly, Kurahashi discloses that the analysis duct is between the infrared source and the photodetector.

In order to provide teachings of a sensor adapter having a receiving device, the device of Davenport/Kurahashi is further modified using the teachings of Braig. Braig discloses an analysis duct comprising windows and wherein the outer surface of the analysis duct includes a sensor adapter that detachably receives a sensor/gas analyzer housing (see Fig. 1). The windows allows infrared transmission to pass from one end of the gas analyzer housing, through the windows of the analysis duct, and back to the detector of the outer end of the gas analyzer. Thus, Braig discloses a circuit diagram that is similar to that of Kurahashi. The motivation for using the sensor adapter of Braig is to allow the reuse of the sensor for analyzing the expired respiratory gases of other patients having their own mask assemblies.

It is also noted that the Braig reference is only being provided teaching of the analysis duct and the removable gas analyzer housing. The Braig reference is not being used to replace the entire gas concentration analyzer system of Kurahashi. Therefore, the argument regarding the Braig reference using a pump is moot.

It is also noted that a new grounds of rejection under 35 USC 112, first paragraph is provided with this Examiner's Answer. During the appeal conference, it was determined that the amended limitation for claim 44, filed on Nov. 16, 2006, raises the issue of new matter.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent

applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,

/Darwin P. Erez/  
Primary Examiner, Art Unit 3773

**A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:**

/DONALD HAJEC/  
Director, Technology Center 3700

Conferees:

/(Jackie) Tan-Uyen T. Ho/  
Supervisory Patent Examiner, Art Unit 3773

/Janet C. Baxter/  
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